

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: **Larsson and Radevik**

Serial No.: **10/599,377**

Group Art Unit: **1624**

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Examiner: **Venkataraman Balasubramanian**

Confirmation No.: **7759**

Title: **Chemical Process**

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**Mail Stop Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**RESPONSE UNDER 37 CFR § 1.111**

In response to the Office Action dated April 23, 2008 in regard to the above-identified patent application, Applicants respectfully request reconsideration of the rejections therein.

Claims 1 and 3-20 are pending in the present application.

**I. The Claimed Invention Is Novel**

**A. The Larsson Reference**

Claims 1, 3-12, 16, 17, and 19 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by International Application Publication WO 01/92263 (hereinafter, the “Larsson reference”). The Office mistakenly asserts that the “reagent and the reaction conditions [of the Larsson reference] are all same as in instant process” and that the “fact that instant process recites the intermediate formed during the process is irrelevant as the overall process is for making compound of formula I” (see, Office Action at page 3). Applicants traverse the rejection

and respectfully request reconsideration because the Larsson reference does not teach every feature recited in claims 1, 3-12, 16, 17, and 19.

Applicants submit that the Office is not applying the proper standard for anticipation. The Office is reminded that the standard for anticipation under §102(b) is one of **strict identity**. An anticipation rejection requires a showing that **each** feature of a claim be found in a single reference. *Atlas Powder Co. v. E.I. DuPont de Nemours & Co.*, 224 U.S.P.Q. 409, 411 (Fed. Cir. 1984). Indeed, the Larsson reference **does not** teach each feature recited in claim 1. For example, the Larsson reference **does not** teach conducting a one-pot hydrogenation of a compound of formula (III) “firstly at about 20°C to form a compound of formula (IV)...” as recited in claim 1. The Office appears to completely dismiss this step. Applicants submit that the Office **must** point out in the Larsson reference where this step is reported in order to maintain the rejection.

In the absence of teaching each feature of the claimed invention, the Larsson reference does not anticipate Applicants’ claimed invention. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §102(b) be withdrawn.

#### B. The Fisons Reference

Claims 1, 3-5, 9, and 11 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by European Patent Application No. 0508687A1 (hereinafter, the “Fisons reference”). The Office mistakenly asserts that the “starting material (compound of formula II), the final product (compound of formula I), the reagent and the reaction conditions [of the Fisons reference] are all same as in instant process” (see, Office Action at pages 3-4). Applicants traverse the rejection and respectfully request reconsideration because the Fisons reference does not teach every feature recited in claims 1, 3-5, 9, and 11.

As stated above, the standard for anticipation under §102(b) is one of **strict identity**. If **each** feature of a claim cannot be found in a single reference, then an anticipation rejection cannot be maintained. In this regard, the Fisons reference is deficient. Claim 1 recites, in part, hydrogenating a compound of formula (II) with “a suitable transition metal **catalyst**...” As one skilled in the art understands, a catalyst operates in a non-stoichiometric manner and is not consumed in the chemical process. The Office points to the reduced iron powder in step iv) of

Example 9 in the Fisons reference and appears to assert that it is a suitable transition metal catalyst. The reduced iron powder, however, operates in a stoicheometric manner and is consumed in this chemical process – thus, the reduced iron powder is not a catalyst, let alone “a suitable transition metal catalyst.”

In the absence of teaching each feature of the claimed invention, the Fisons reference does not anticipate Applicants’ claimed invention. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §102(b) be withdrawn.

## II. The Claimed Invention Is Not Obvious

Claims 1 and 3-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Larsson reference in view of U.S. Patent No. 6,818,720 (hereinafter, the “Krauter reference”). In particular, the Office alleges that “one trained in the art would be motivated to make compound of formula I using the overall process taught by the combined references by varying the catalyst, solvent temperature and pressure of the reaction and expect to obtain the desired product because he would have expected the analogous starting materials and reactants react similarly in view of the combine teaching of the prior art” (see, Office Action at page 8). Applicants traverse the rejection and respectfully request reconsideration because the combination of the Larsson and Krauter references does not teach every feature recited in claims 1 and 3-20.

The statements above in regard to the deficiency of the Larsson reference are incorporate herein for the sake of brevity.

The Krauter reference does not cure the deficiency of the Larsson reference referred to above. That is, the Krauter reference does not teach or suggest conducting a one-pot hydrogenation of a compound of formula (III) “firstly at about 20°C to form a compound of formula (IV)...” as recited in claim 1. Indeed, the Krauter reference reports hydrogenation of “aromatic nitro-compounds” or “nitroaromatics” and, in particular, “nitrobenzene to aniline” and “dinitrotoluenes to toluenediamines” with particular “supported hydrogenating catalysts in powder form, which contains, as catalytically active components, a mixture of a primary precious metal component, a secondary precious metal component and one or more non-precious

metal components" (see, the Krauter reference at column 1, lines 9-11; column 3, lines 12-16, and column 2, lines 1-14). Such reports do not cure the deficiency of the Larsson reference.

To the extent that the Examiner meant to apply the Krauter reference in combination with the Fisons reference, such combination also does not result in Applicants' claimed invention. As stated above, claim 1 recites, in part, hydrogenating a compound of formula (II) with "a suitable transition metal catalyst..." There is no specific motivation for eliminating the reduced iron powder of the Fisons reference and replace it with the particular "supported hydrogenating catalysts in powder form, which contains, as catalytically active components, a mixture of a primary precious metal component, a secondary precious metal component and one or more non-precious metal components" of the Krauter reference. Even if so combined, the claimed invention is not produced.

Thus, the claimed invention is not obvious in view of the combination of cited references. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn.

### III. Obviousness-type Double-Patenting

Claims 1-20 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 3 and 4 of co-pending Application No. 11/591,464. The rejection is currently provisional. Applicants submit that this provisional rejection should be the only remaining rejection and thus, should be withdrawn.

**IV. Conclusion**

Applicants respectfully submit that the claims are in condition for allowance. An early notice of the same is earnestly solicited. The Examiner is invited to contact Applicants' undersigned representative at (610) 640-7859 to resolve any remaining issues.

The Commissioner is hereby authorized to debit any underpayment of fee due or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,

/Paul K. Legaard, Reg. # 38534/  
Paul K. Legaard, Ph.D.

Date: **23 June 2008**

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